

## Ohio River Bridges Public Meeting Boards

Project Item Number: 5-118.00

County and Route: Jefferson, New Bridges and Kennedy Interchange (I64, I71, I65)

Project Description: Construction of two new Ohio River bridges linking Louisville and Southern Indiana, and reconstructing the Kennedy Interchange (Spaghetti Junction) where I-65, I-71 and I-64 converge near downtown Louisville

Project Manager Contact information (Cabinet): Matt Bullock, P.E., Department of Highways – District 5, 8310 Westport Road, Louisville, KY 40242, (502) 210-5400

Project Manager Contact Information (Consultant): John Sacksteder, P.E., Project Manager at Community Transportation Solutions – General Engineering Consultant, 305 N. Hurstbourne Parkway, Suite 100, Louisville, KY 40223, 502-394-3847

Other contacts: J. B. Williams, P.E., Project Manager (Section 2), Michael Baker, Inc., 9750 Ormsby Station Rd, Suite 210, Louisville, KY 40223, (502) 339-3557

Approximate dates: September 20 and 22, 2005

Comments (number of people reached, effectiveness of the technique, what you would do differently, etc.): This meeting was an Open House held in two locations – one in Kentucky and one in Indiana. Each meeting lasted from 4:00 PM to 8:00 PM and was the first of four steps utilized to develop a Bridge Type for the new Downtown Bridge. The Open House utilized a general presentation of materials (large boards and video) that individuals could review and provide comment, utilizing provided cards, at the meeting or sent in within 15 days after the meeting. The general presentation was also supplemented by two formal presentation of materials at pre-set times. The dual presentations provided everyone the best opportunity to gain information, ask questions and to be able to express their views. 110 people attended these Open Houses.



## PUBLIC OPEN HOUSE Downtown Bridge - Section 2



## TONIGHT'S MEETING

4-8 p.m. Self-Guided Tour of Exhibit Stations:

- About the Project
- Team Information
- Bridge Type Selection Process
- Public Involvement
- Context Sensitive Design
- Project Parameters
- Bridge Types
- Environmental Issues
- DBE (Disadvantaged Business Enterprise) Involvement
- "View of the Bridge" Interactive Exhibit



5:00 p.m. Presentation & Discussion\*

6:30 p.m. Presentation & Discussion\*

\* These presentations are the same.





## Project Overview

- **Project goal:** address long term cross-river transportation needs in the Louisville/Southern Indiana region.
- **September 2003:** Detailed analyses and extensive public outreach culminated in Record of Decision and Federal Highway Administration authorization.

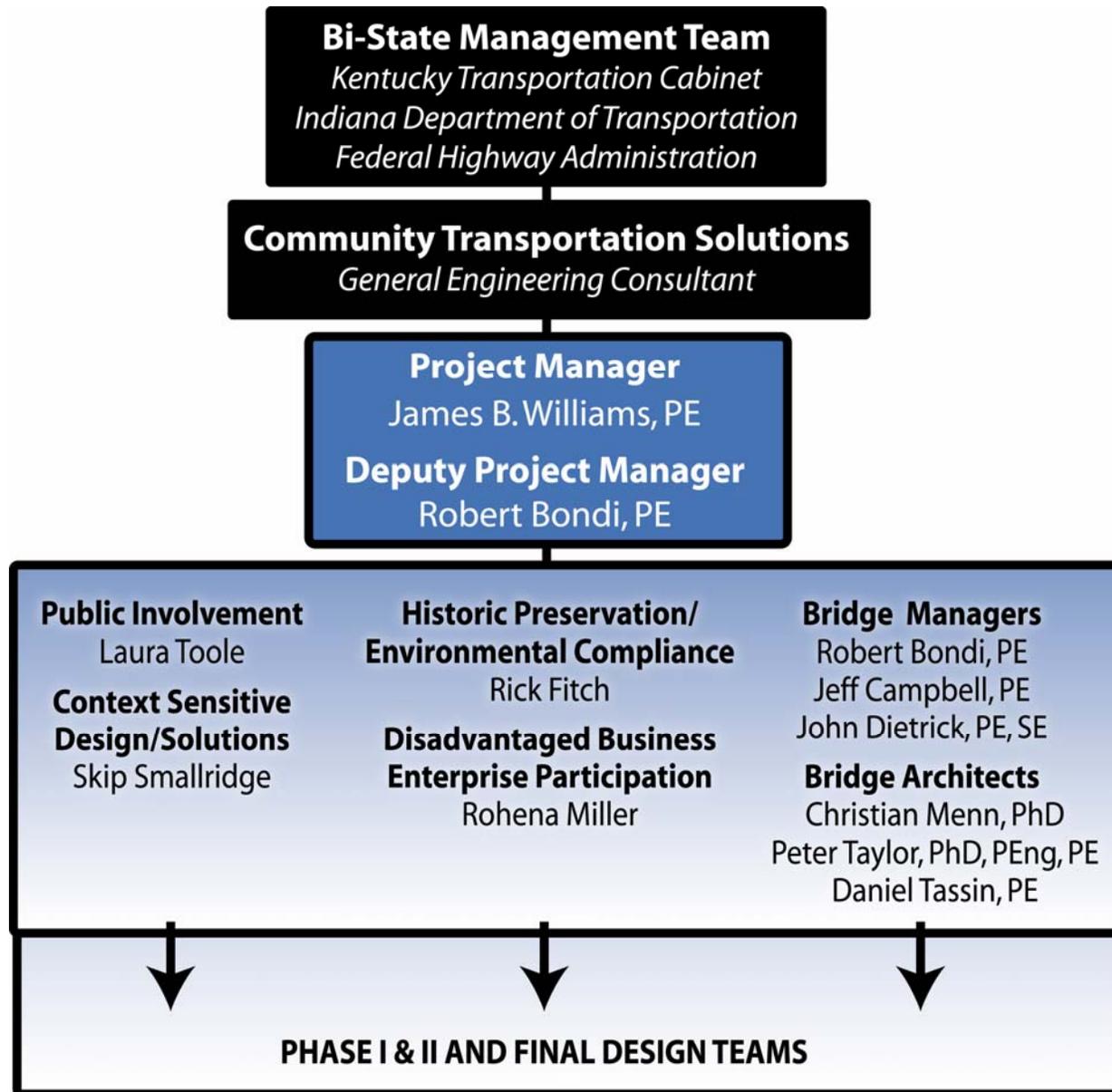
## The Design Selection Phase

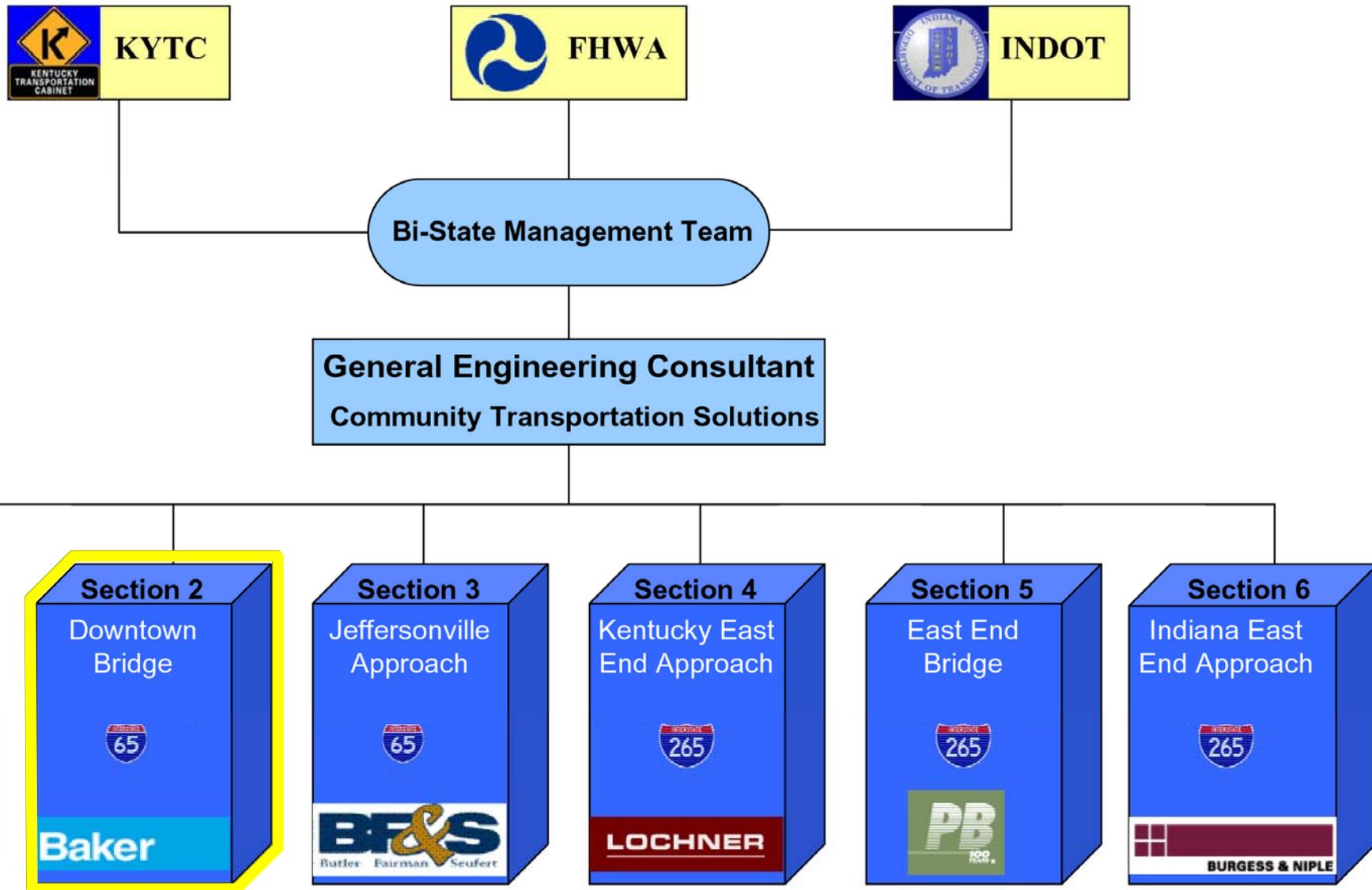
- Determines types of bridges and Context-Sensitive Design guidelines through extensive community feedback.
- Incorporating public input, cost and engineering feasibility, an executive oversight committee with bi-state representation will ultimately select the bridge type.

## The Downtown Bridge Design Team

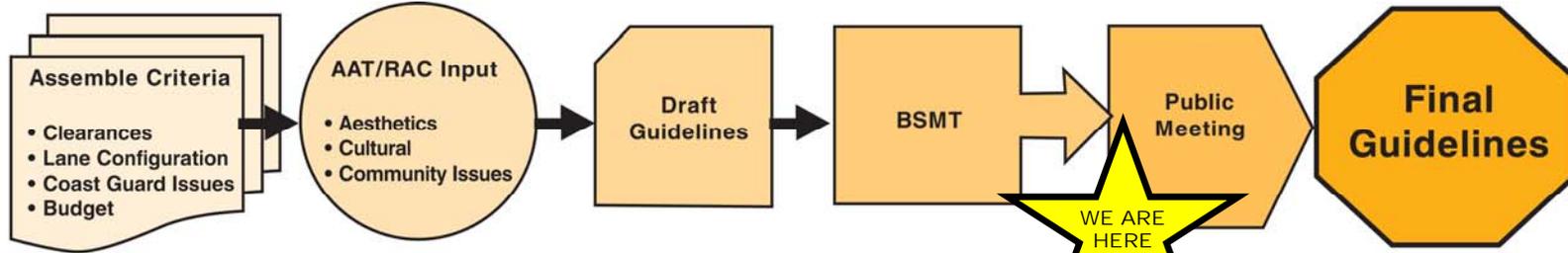
- A team led by Michael Baker Jr., Inc. will come up with initial concepts for the new Downtown Bridge with Bi-State oversight.
- The work program includes creating initial design concepts and refining these concepts to a set of final bridge type alternatives.
- Bridge type selection is estimated to take one year.



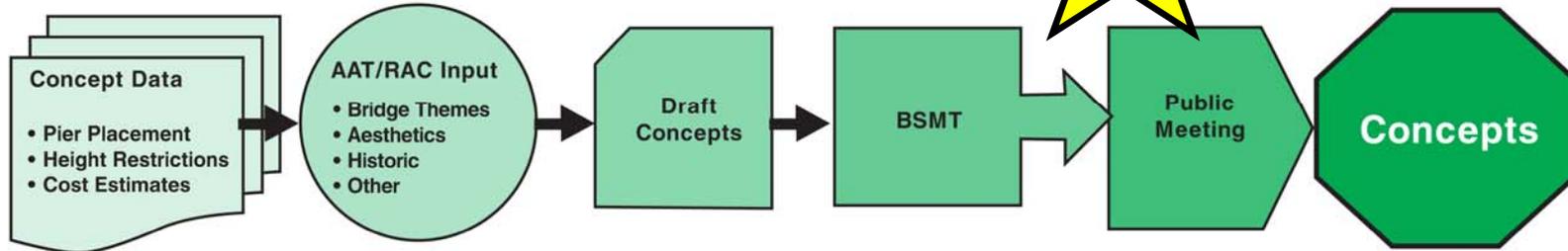




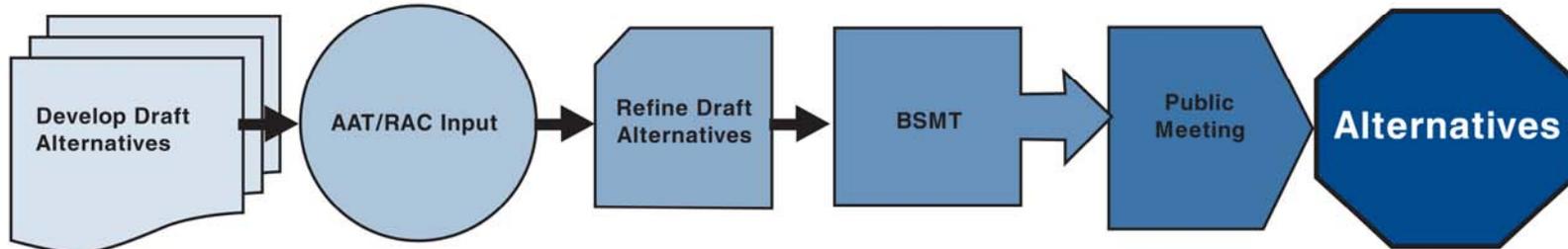
## STEP 1 DEVELOP GUIDELINES



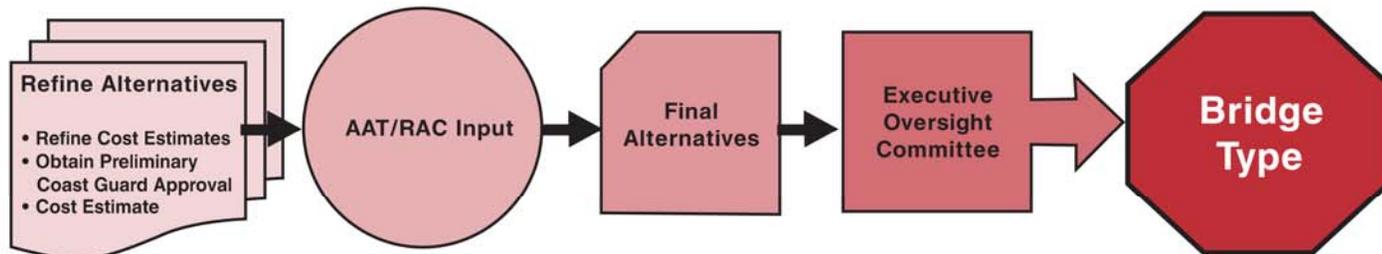
## STEP 2 DEVELOP CONCEPTS



## STEP 3 DEVELOP ALTERNATIVES



## STEP 4 SELECT BRIDGE TYPE



## General Public Meetings:

- ✓ September 20 & 22, 2005 (Project Parameters & Design Guidelines)
- ❑ November/December 2005 (Final Design Guidelines, Bridge Concepts)

## Area Advisory Team (AAT)/Regional Advisory Committee (RAC) Meetings:

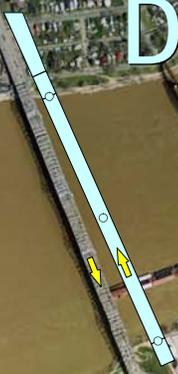
- ✓ June 30, 2005 (AAT only)
- ✓ August 9, 2005
- ❑ November 3, 2005 (Final Design Guidelines, Bridge Concepts)
- ❑ Winter 2006
- ❑ Spring 2006

## DBE Community Meeting:

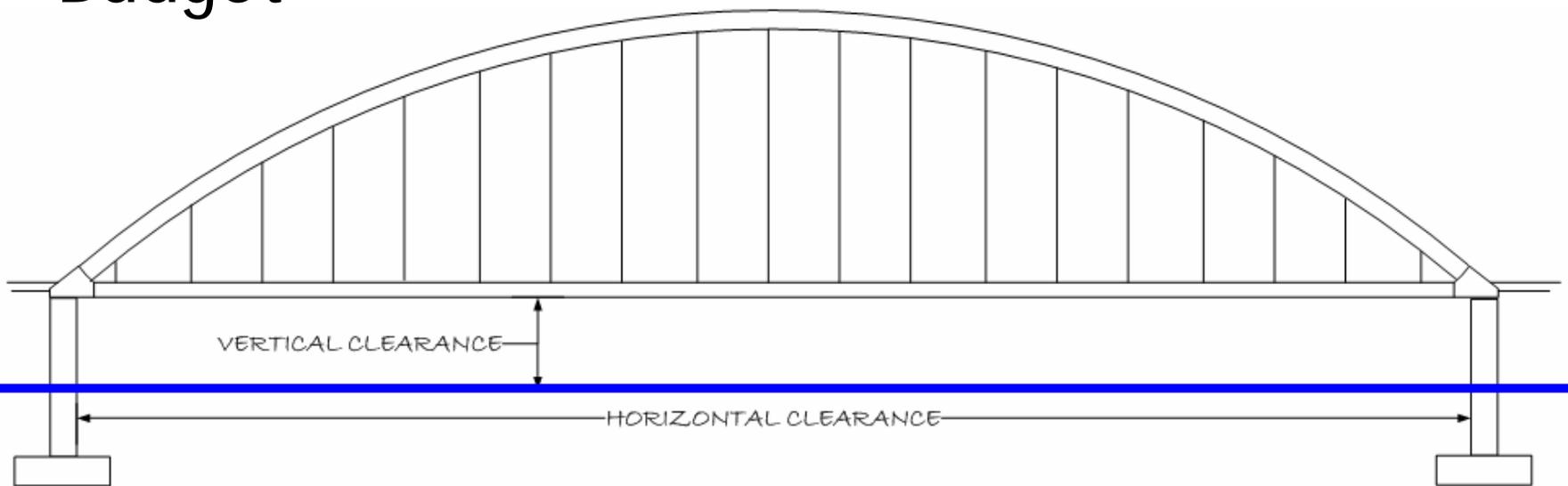
- ✓ September 13, 2005



Downtown  
Bridge



- Navigation Clearances
- Design Specifications and Site Specific Loads
- Bridge Cross-Section
- Budget

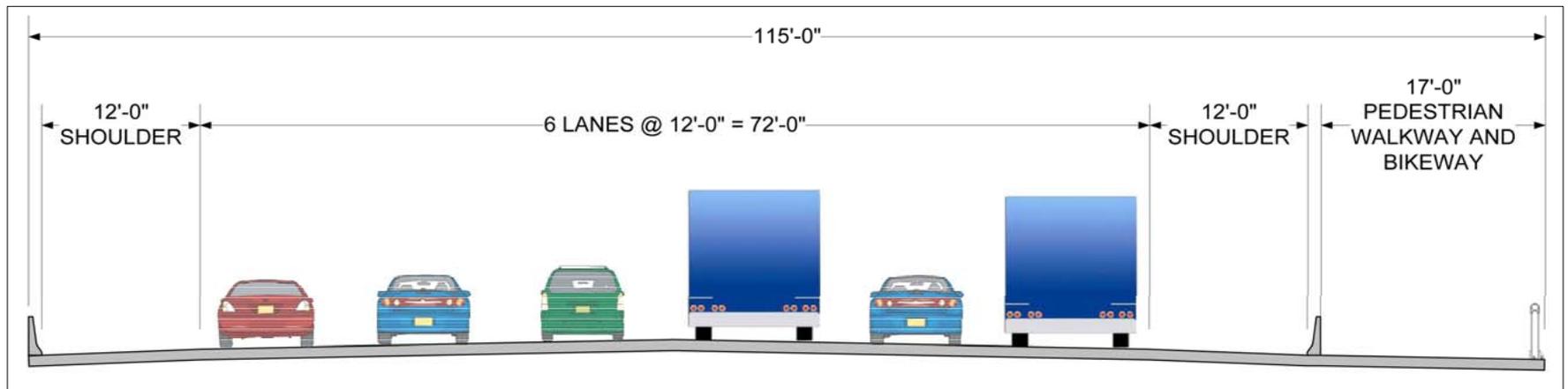


- **Navigation Clearances (800' - 1100')**
  - Final minimum horizontal clearance is to be determined
  - Final minimum vertical clearance is 71 feet above normal pool, amount of feet above 100-year flood level is to be determined
  - Minimum vertical and horizontal clearances during construction are to be determined
  
- **Design Specifications and Site Specific Loads**
  - Design must meet all applicable roadway and structural design codes and specifications
  - Design must take into consideration site-specific loads: seismic, barge impact, wind, etc.



## Bridge Cross-Section

Must provide six adjacent one-way (northbound) 12-foot traffic lanes, two 12-foot shoulders and one 17-foot pedestrian/bike pathway on the east side of the bridge (upstream)



## Budget

\$203 Million construction budget



- Section 4(f) Resources
- Historic Resources
- River Crossing Constraints
- Permits



**U.S. COAST GUARD**



## Section 4(f) Resources:

A Department of Transportation Act adopted in 1966 that requires the Federal Highway Administration to consider the impacts to park and recreational lands, wildlife and waterfowl refuges, and historic sites during transportation project development and determine that there are no "prudent and feasible" alternatives to taking the land of listed resources.

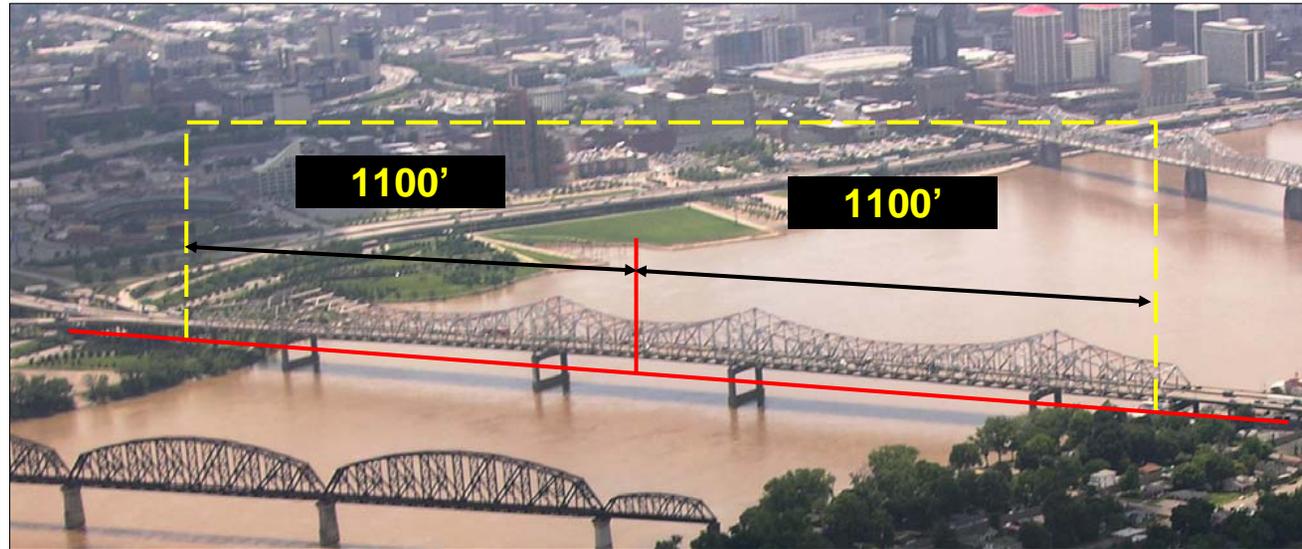


## Historic Resources:

Covered under Section 106 of the National Historic Preservation Act of 1966 which governs the identification, evaluation, and protection of historic and archaeological resources affected by State and federal transportation projects.



- **River Crossing Constraints**

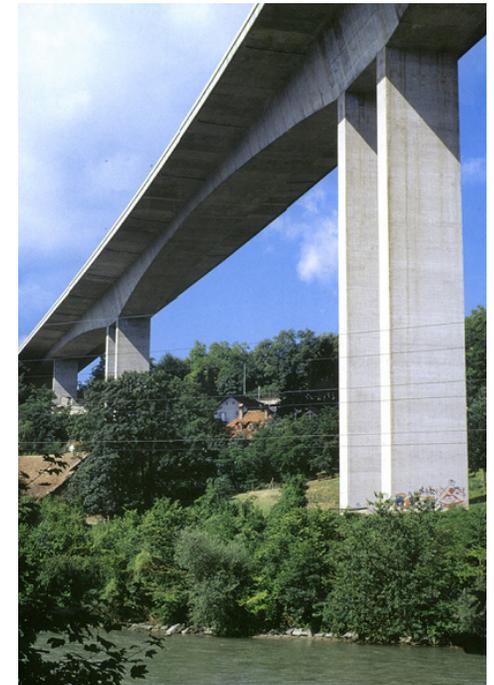


- **Permits**

- US Coast Guard
- US Army Corps of Engineers
- Indiana Department of Environmental Management (IDEM)
- Kentucky Environmental and Public Protection Cabinet (KEPPC)

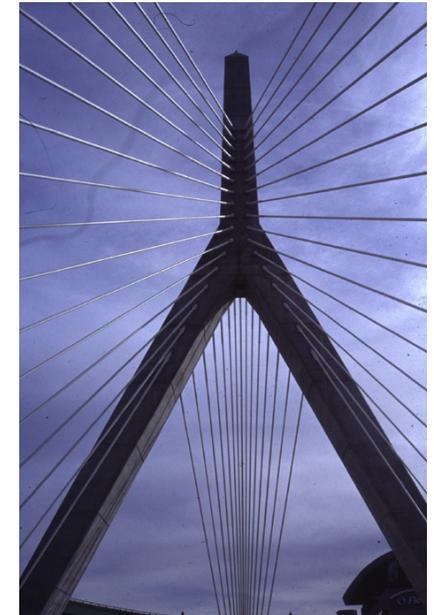
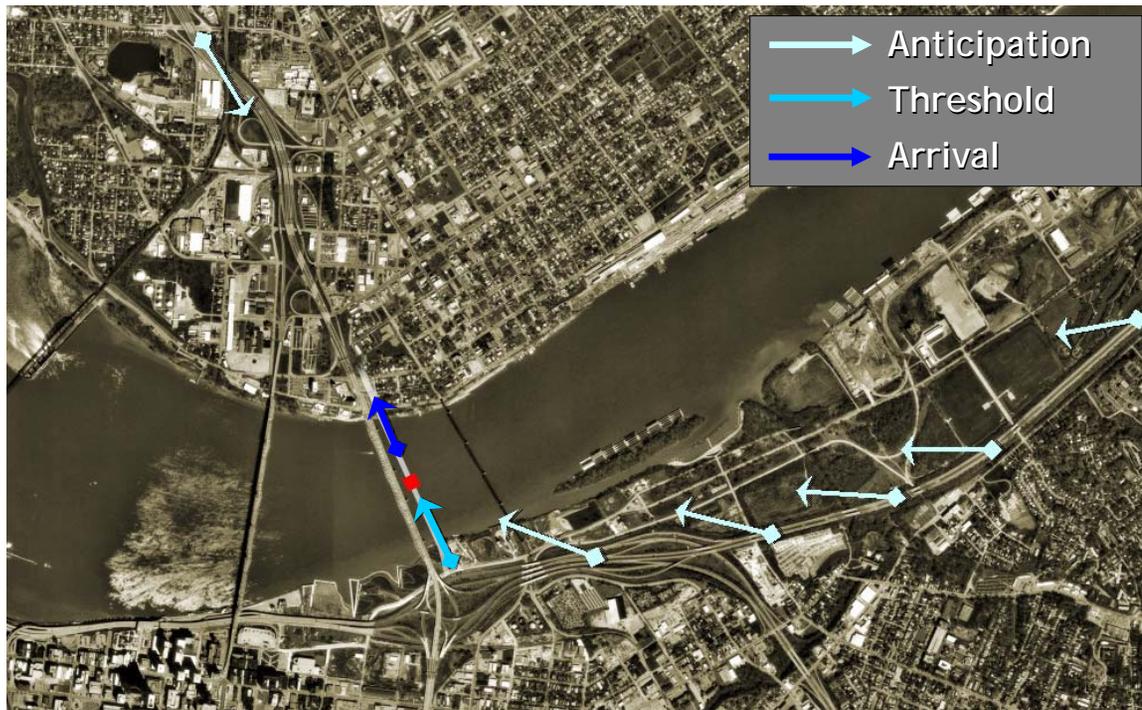
The design addresses the **Structural, Aesthetic, and Contextual Issues** in an integrated manner from four points of view:

- Landmark in the Urban Landscape
- Gateway for Users
- An Urban "Room"
- The Pedestrian Experience



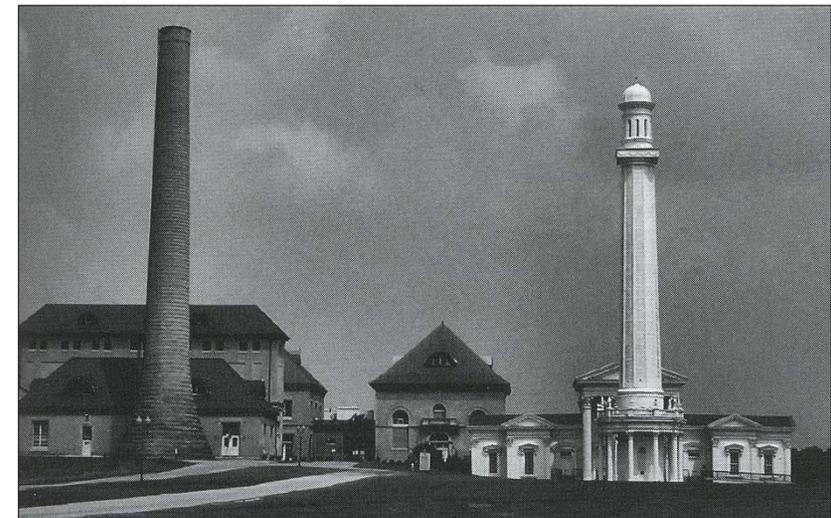
## Gateway Elements

- Approach/Anticipation
- Threshold
- Arrival
- Arch/Tower/Cables/Truss



LANDMARK

Landmark in the urban landscape that exemplifies the design culture of our time and reflects the history and culture of the site.



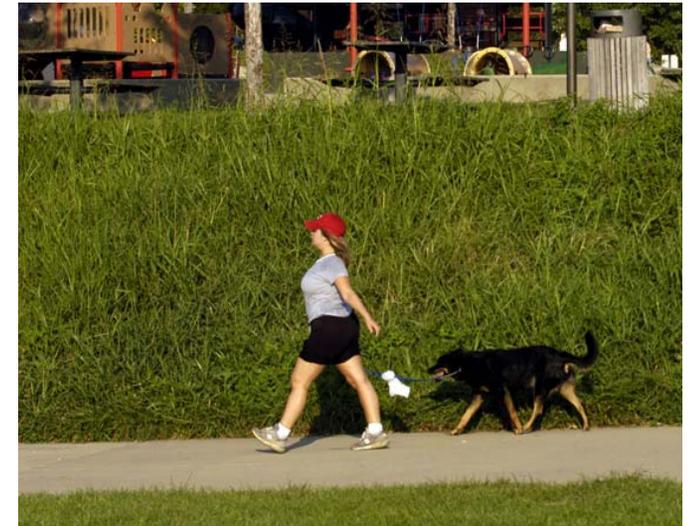
URBAN "ROOM"

The proximity of the bridges forms a new urban space.



## What We've Heard

- Enhance the Pedestrian Experience
- Emphasize an Uncluttered/Visually Simple Appearance
- Maximize Sunlight at Ground Level
- Not an Intrusion... an Opportunity to Celebrate Design
- Maintain Sightlines/Visual Continuity of the Ground Plane at River's Edge
- Integrate Elements of the Bridge into Landscape and Park Lands



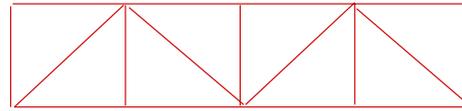
## The Bridge from a Pedestrian Perspective

- Piers
- Underside of Deck
- Superstructure
- Secondary Elements





Local Example of  
Through Truss  
(Kennedy Bridge)



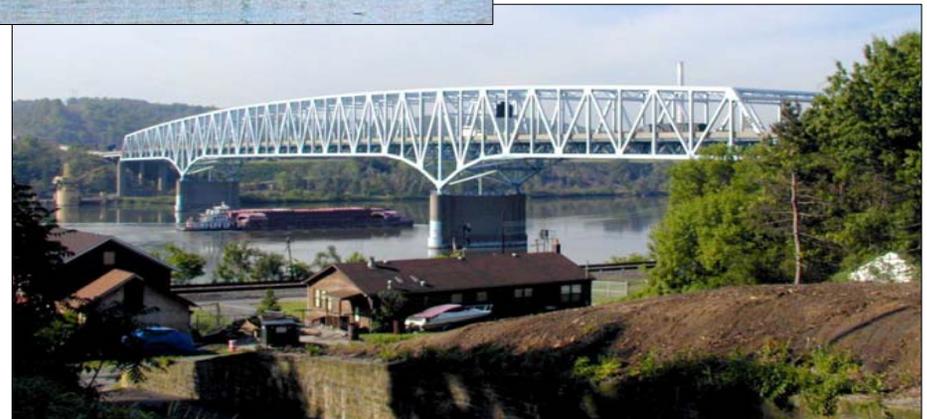
Variable Depth Truss



Deck Truss



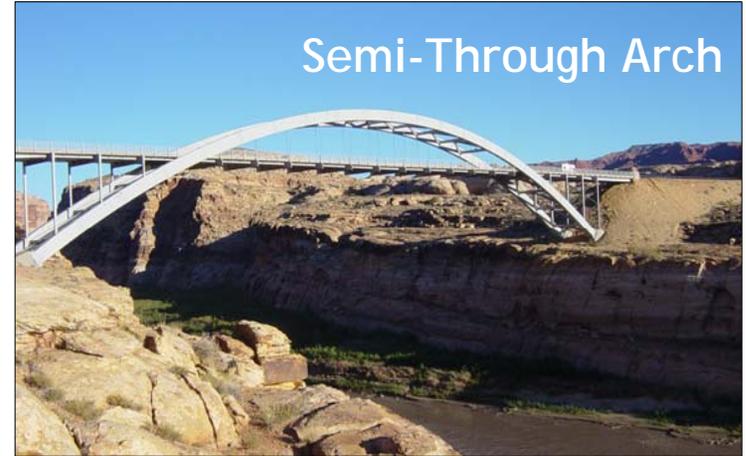
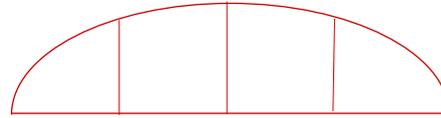
Constant Depth Truss



Truss Deepened over Pier



Local Example of Through Arch  
(Sherman Minton Bridge)



Parallel Arch Rib with  
Vertical Cables



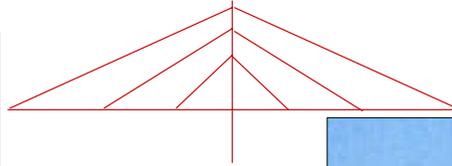
Inclined Arch Rib & Cables



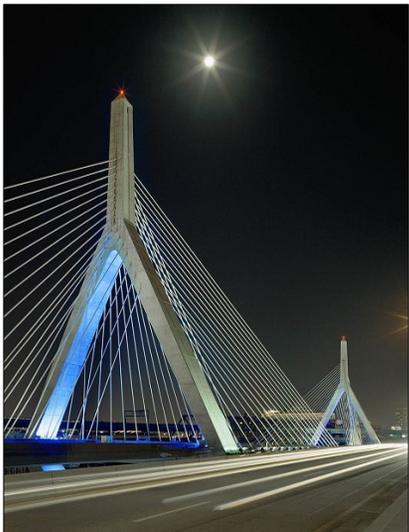
"Network" (Intersecting)  
Cables



Local Example (Maysville Bridge)  
Two Planes of Stays on Outside



Single Plane of Stays, Single  
Column Tower



A-Shaped Tower



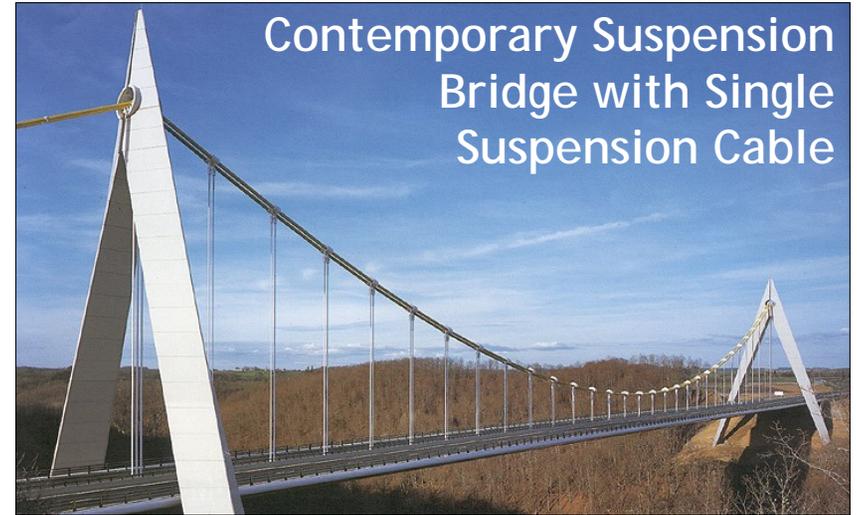
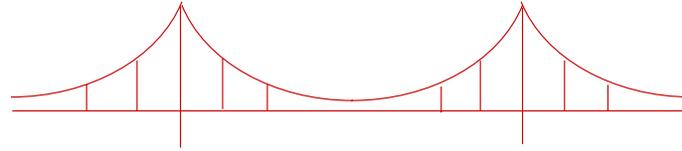
Portal Tower with Cables on Outside



Asymmetric Cable  
Arrangement



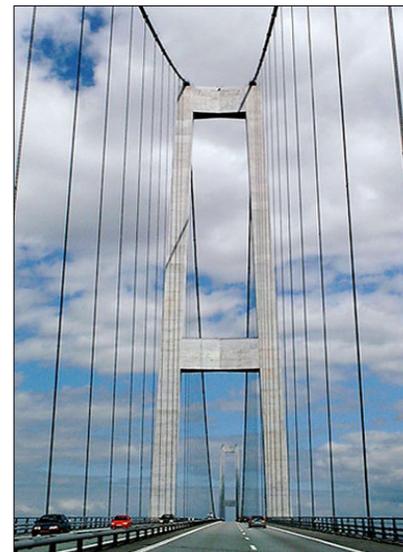
Closest Local Example (Roebling Suspension Bridge)



Contemporary Suspension Bridge with Single Suspension Cable



Typical Anchorage for Suspension Bridge



Portal Tower with Cables on Outside of Deck

## DBE: Disadvantaged Business Enterprise

### Background:

The Kentucky Transportation Cabinet (KYTC) has a policy of nondiscrimination in the award of its contracts. It is KYTC's policy that DBE's have the opportunity to participate in all Federal highway projects through neutral means and a combination of race and gender conscious and race/gender neutral goals for projects financed in whole or in part by Federal Funds. The DBE program is to create a level playing field for all businesses that wish to contract with the cabinet, and to ensure that only firms that fully meet eligibility standards are permitted to participate as DBE contractors.



## Section 2 DBE (Disadvantaged Business Enterprise) Firms:

- ClasSickle, Inc.
- Crosby | Schlessinger | Smallridge LLC
- Global Solutions, LLC
- Niche Marketing

## Section 2 DBE Activities:

- ✓ Community Meeting: September 13, 2005
- ✓ Kentucky Engineer Scholars Program (KESP)
- ✓ National Minority Supplier Development Council National Convention
- ✓ Mentoring Program with Global Solutions

### Section 2 DBE Participation Contact

Rohena Miller

502.583.5243

*Rohena@nichemktg.com*



## Downtown Bridge Office

9750 Ormsby Station Rd, Ste 210  
Louisville, KY 40223

502-339-3557  
502-339-4486 (FAX)

## Section 2 Project Manager

J.B. Williams, P.E.

502-339-3557

*jwilliams@mbakercorp.com*



## General Engineering

Robert Bondi

412-269-7907

*rbondi@mbakercorp.com*



John Dietrick

216-776-6626

*jdietrick@mbakercorp.com*



## Context Sensitive Design

Skip Smallridge

617-399-7000

*ssmallridge@cssboston.com*



## Environmental

Rick Fitch

614-459-2050

*rfitch@burnip.com*

## Public Involvement

Laura Toole

914-333-5300

*ltoole@mbakercorp.com*

## DBE Participation

Rohena Miller

502-583-5243

*rohena@nichemktg.com*

Community Transportation Solutions  
General Engineering Consultant

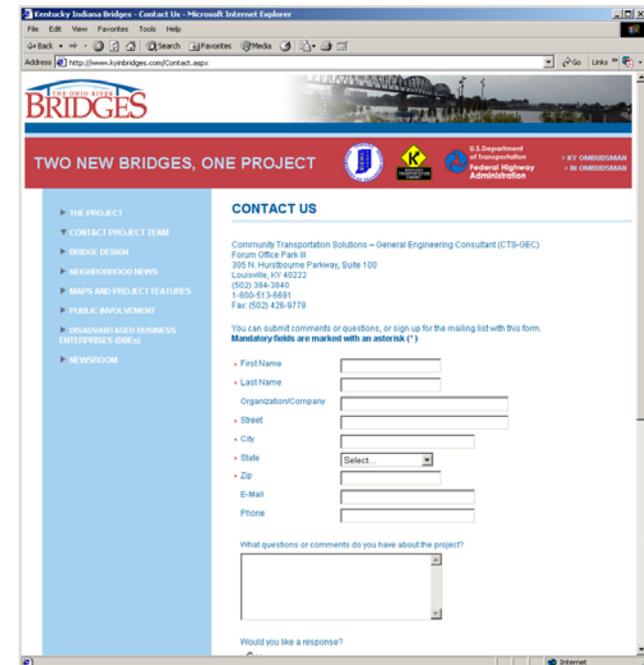
Project Manager

John Sacksteder

502.394.3847

*jsacksteder@ctsgec.com*

Website: *www.kyinbridges.com*

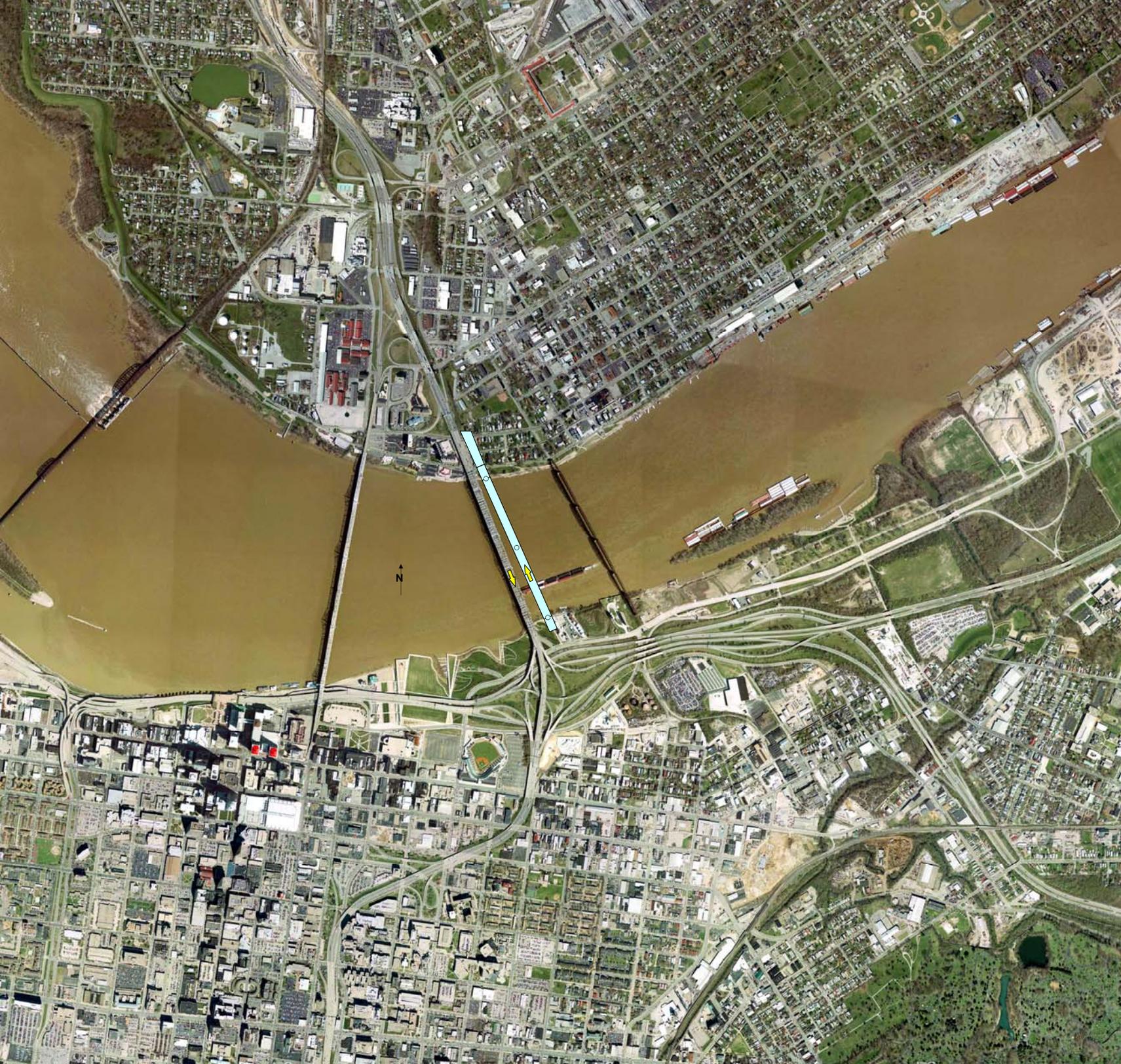


# SPEAK TO US



# WRITE TO US





# YOUR VIEW OF THE BRIDGE

Place stickers  
for any of the  
following  
categories:

I see the bridge  
from where I...

- Live
- Drive
- Work
- Walk
- Bike
- Boat